

REMARKS

Status of Claims

Claims 9, 13–30 and 32–33 were previously canceled; claims 10, 34 and 39 are now canceled.

Claims 1, 5, 11, 12, 31 and 35–38 are currently amended.

New claims 51–64 are added.

Claims 1–8, 11, 12, 31, 35–38 and 40–64 are pending.

Claim Rejections Under 35 U.S.C. § 112, First Paragraph

In the Office Action, claims 1–8, 10–12, 31 and 34–50 are rejected as lacking enablement in the specification for the full scope of the claims. The Office Action acknowledges that the claims are enabled for treating allograft rejection by suppressing a Janus tyrosine kinase 3 (Jak3)-dependent function of a cell expressing Jak3, or by suppressing an undesired Jak3-dependent function of a cell expressing Jak3 with a compound represented by the formula I, or a salt thereof. It is also said that the specification provides an assay method (*in vitro*) using the compound 649651P and discloses that the compound is effective in reducing the proliferation of γ c/Jak3-dependent PHA-activated human T-cells or proliferation of T-cells cultured in the presence of the Jak2 activator or the Jak3 activator.

The Office Action takes the position that the specification does not reasonably provide enablement for "suppressing a Janus tyrosine kinase (Jak3)-dependent function..." or "an *in vivo* method of suppressing an undesired Jak3-dependent...". It is said that the broadest reasonable interpretation of the instant claims allow for the inclusion of treatment of numerous diseases or disorders associated with proliferation of cells expressing Janus tyrosine kinase 3. According to the Office Action, it is not yet known that a single underlying mechanism ties together all of the seemingly unrelated manifestations encompassed by the instant claims, and, therefore, an undo amount of trial and error experimentation by the artisan would be required to find out which disease or condition would be responsive to the administration of a Jak3-inhibitor. The Office Action also takes the position that there is no demonstrated correlation in the specification that the *in vitro* assay tests and results apply to the claimed utility embraced by the instant claims.

Claim 1 is currently amended to more closely correspond to the Office Action's statement on page 5 regarding the assay method provided by the instant specification. As such, claim 1 now recites "[a]n *in vitro* method of suppressing Jak3-dependent proliferation of a cell ...," instead of "suppressing a Jak3-dependent function". This claim is supported in the specification by Example 1 (paragraphs [0061]–[0066]) and Figs.

1A-B, for example. Claim 1 is further amended to recite *in vitro* method in the claim preamble. *In vivo* methods are now encompassed by new claims 51–53, which are discussed in more detail below.

The current amendments to claim 31 are similar to those of claim 1, and also place amended claim 31 in closer correspondence with the enabled subject matter of the instant specification, as identified by the Office Action. The amendment to claim 31 is supported in now-canceled claim 39, and elsewhere in the specification and original claims.

Claim 5 is currently amended to improve claim form by rephrasing the subject matter of the claim.

Claims 11, 12, 35, and 38 are currently amended to change their dependency to new claim 51 instead of now-canceled claim 10 (drawn to *in vivo* suppression of Jak3-dependent function).

Claims 12, 35 and 37 are amended to change "subject" to "allograft recipient," for consistency of terminology between claims.

Claim 36 is currently amended to correct an unintended improper dependency from itself. As amended, claim 36 now depends more appropriately from claim 4. Claim 36 is also amended to delete "immune origin," for consistency of terminology with claim 4.

In new claim 51, Applicants have amended and re-written the subject matter of (now-canceled) claim 10. Claim 51 is believed to be more consistent with the statement in the Office Action of the subject matter enabled by the instant specification. New claim 51 recites the same compound (I) as the *in vitro* method of claim 1 and requires administration to an allograft recipient, to suppress proliferation of a cell expressing Jak3 in the recipient to treat allograft rejection. This claim is supported in Example 2 (paragraphs [0067]–[0071]) of the specification. Like original claim 10, claims 51–53 are properly included with the elected claims.

New claim 52, which depends from claim 51, is analogous to claim 31 in that it recites the same compound.

New claim 53, which depends from claim 51, is added to ensure coverage of a specific embodiment to which Applicants are entitled. Support for the "enhanced allograft survival limitation" of claim 53 is found in Example 2 (paragraphs [0067]–[0071]) of the specification, which describes enhancing or prolonging allograft survival in an animal model. Claim 53 is also consistent with the subject matter which is said in the Office Action to be enabled by the specification.

New Claims 54–64 are added to ensure coverage of specific embodiments to which Applicants are entitled. These *in vivo* method claims depend from claim 51 and recite limitations that are analogous to, and supported by, the respective *in vitro* method claims 40–50, and elsewhere in the specification.

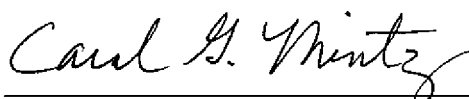
Claims 51–64, which are based on subject matter of now-canceled claim 10, are properly included with the elected group of claims, drawn to a method of inhibiting function and/or proliferation of a cell expressing Jak3, comprising administering a compound of the formula (I). Claim 51 and claim 1 are linked by their common use of the Jak3 inhibitor compounds of Formula (I) for suppressing function and/or proliferation of a Jak3-dependent cell.

Conclusion

Applicants believe that claims 1–8, 11, 12, 31, 35–38 and 40–64, as currently amended, comply with the requirements of 35 U.S.C. § 112, first paragraph. Accordingly, reconsideration of this application and withdrawal of the rejections and objections are respectfully requested in light of the foregoing amendments and remarks. Applicants request allowance of all pending claims.

This is believed to be a full and complete response to the Office Action dated December 15, 2006. If any issue in the Office Action has been overlooked or is deemed to be incompletely addressed, Applicants respectfully request the opportunity to supplement this response. It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. In the event that any additional extension of time is necessary to allow consideration of this paper, such extension is hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Deposit Account Number 03-2769 of Conley Rose, P.C., Houston, Texas.

Respectfully submitted,



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